Dr. Karen Gaines: Biography

TITLE:

From alligators to astronauts: what we’ve learned and how can we apply it to help human kind?

Dr. Karen Gaines has served as Dean of the College of Arts and Sciences at Embry-Riddle Aeronautical University (ERAU), Daytona Beach since 2016. Prior to joining ERAU, Dr. Gaines worked at the US Department of Energy’s (USDOE) Savannah River Site, before joining the faculty of Eastern Illinois University where she served as Department Chair of Biological Sciences and founding Director of the Geographic Information Science Center. Dr. Gaines is an interdisciplinary scientist whose expertise primarily focuses on toxicological exposure pathways for both environmental and human risk assessment, specifically as it pertains to health physics, radiobiology, metals and organics. Dr. Gaines has received numerous research and leadership awards for her work with the USDOE, US Environmental Protection Agency as well as the US Department of Defense. Dr. Gaines continues to serve these agencies, not only as a risk assessor, but also as an expert in spatial data analytics.

Dr. Gaines’ PhD is in Environmental Health from University of South Carolina’s Arnold School of Public Health, where she was awarded the doctoral achievement award for her work in identifying pathway exposures for vulnerable populations living near nuclear waste sites. Dr. Gaines works closely with the Aerospace Medical Society, American Public Health Association, and the Society of Environmental Toxicology and Chemistry in various capacities and is an appointed member of both the Health Physics Society and the International Union of Radioecology. Since joining ERAU, Dr. Gaines has worked closely with NASA researchers looking at how life reacts to extreme environments by applying her knowledge in radioecology.